



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CML 15.0062X

Issue No: 1

Certificate history:

Issue No. 1 (2017-05-15)

Issue No. 0 (2016-04-01)

Status: **Current**

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Date of Issue: **2017-05-15**

Applicant: **Trox Ltd**
Newby Road,
Hazel Grove,
Stockport,
Cheshire
SK7 5DY,
United Kingdom

Equipment: **GasHawk TX7000 handheld portable gas monitor**

Optional accessory:

Type of Protection: **Intrinsic safety and Flameproof**

Marking:

Ex ia I Ma Ex ia IIC T4 Ga Ex ia da I Ma Ex ia d IIC T4 Gb
Ex ia d I Ma Ex ia db IIC T4 Gb (-20°C ≤ Ta ≤ +50°C)

Approved for issue on behalf of the IECEx
Certification Body:

H M Amos

Position:

Technical Manager

Signature:
(for printed version)

Date:

May 14, 2017

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port
CH65 4LZ
United Kingdom





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Manufacturer: **Trox Ltd**
Newby Road,
Hazel Grove,
Stockport,
Cheshire
SK7 5DY
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/CML/ExTR16.0030/00](#)

[GB/CML/ExTR17.0055/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0017/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The GasHawk TX7000 handheld portable gas monitor is designed to detect the presence of up to six gases simultaneously including oxygen, toxic and combustible gases and provide visual, audible and physical (vibrator) alarms if the set limits are exceeded. The equipment comprises an optional built-in pump for pre-enter testing in confined space and gas pocket monitoring

See Annex for full description and Conditions of Manufacture

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annex for Conditions of Certification



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1

This variation introduces the following modifications to the GasHawk TX7000:

1. The addition of two pressure sensor IC's to the Sensor/Interface PCB
2. The replacement of three Zener diodes on the Sensor/Interface PCB with alternative parts
3. Changes to the case sealing arrangements
4. The use of an alternative encapsulant
5. Minor amendment to safety component table of original safety assessment report

Annex:

[IECEx CML 15.0062X Annex Issue 1.pdf](#)

Annexe to: IECEx CML 15.0062X Issue 1
Applicant: Trolex Limited
Apparatus: GasHawk TX7000



Description

The GasHawk TX7000 handheld portable gas monitor is designed to detect the presence of up to six gases simultaneously including oxygen, toxic and combustible gases and provide visual, audible and physical (vibrator) alarms if the set limits are exceeded. The equipment comprises an optional built-in pump for pre-enter testing in confined space and gas pocket monitoring.

The equipment is powered from an intrinsically safe battery pack interchangeable in the hazardous area, which comprises the Lithium Ion rechargeable battery and the Battery PCB. The battery is charged in inductive (wireless) charging system based on Qi architecture.

The main unit comprises the Main MCU PCB, Sensor/Interface PCB and the LCD Interface PCB, all contained in a plastic (polycarbonate base and TPE overmold) enclosure providing a degree of protection of at least IP54. Two buttons and liquid crystal display provide an interface to the end-user and the IrDA port is used for data communication.

The GasHawk TX7000 is marked GasHawk TX7000.xx.xx.xx.xx.xx.xx.xx, where xx details variants that allow alternate versions of the certified product.

Conditions of Manufacture

The following are conditions of manufacture

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

Conditions of Certification

- i. No precautions against electrostatic discharge are necessary for portable equipment that has an enclosure made of plastic, metal or a combination of the two, except where a significant static-generating mechanism has been identified. Activities such as placing the item in a pocket or on a belt, operating a keypad or cleaning with a damp cloth, do not present a significant electrostatic risk. However, where a static-generating mechanism is identified, such as repeated brushing against clothing, then suitable precautions shall be taken, e.g. the use of anti-static footwear.
- ii. The equipment must only be re-charged in the safe (non-hazardous) area.

Variation 1

This variation introduces the following modifications to the GasHawk TX7000:

- i. The addition of two pressure sensor IC's to the Sensor/Interface PCB
- ii. The replacement of three Zener diodes on the Sensor/Interface PCB with alternative parts
- iii. Changes to the case sealing arrangements
- iv. The use of an alternative encapsulant
- v. Minor amendment to safety component table of original assessment report



